UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,845	02/25/2004	John Jay Wolfgang	TUC920030107US1	2951

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EXAMINER
SONG, JASMINE

ART UNIT	PAPER NUMBER
2188	

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/786,845	WOLFGANG ET AL.
	Examiner	Art Unit
	Jasmine Song	2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _25 February 2004_.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-41_ is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1,2,4-32 and 34-41_ is/are rejected.
7) ☒ Claim(s) _3 and 33_ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on _25 February 2004_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _02/25/04 &07/26/04_.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detailed Action

Specification

1.   The lengthy specification has not been checked to the extent necessary to

determine the presence of all possible minor errors. Applicant's cooperation is

requested in correcting any errors of which applicant may become aware in the

specification.

Drawings

2.   The drawings filed on 02/25/2004 have been approved by the Examiner.

Oath/Declaration

3.   The applicant's oath/declaration has been reviewed by the examiner and is found

to conform to the requirements prescribed in 37 C.F.R. 1.63.

Information Disclosure Statement

4.   The information disclosure statement (IDS) submitted on 02/25/2004 and

07/26/2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the

information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 101

5.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6.   Claims 16-30 are not limited to tangible embodiments. In view of Applicant's disclosure, specification page 11, section 0040, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (see applicant's specification, page 21, lines 20-27) and intangible embodiments (see applicant's specification, page 21, last line to page 22, lines 5). As such, the claims are not limited to statutory subject matter and is therefore non-statutory.

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8.   Claims 1-2,4-17,19-32 and 34-41 are rejected under 35 U.S.C. 102(e) as being anticipated by St. Pierre et al., US 6,959,368 B1.

Regarding claims 1,16 and 31, St. Pierre teaches a method for transferring data using multiple backup components, comprising:

assigning responsibility for a portion of data (a portion of data is taught as one of the work items as shown in Fig.4, this work item can be an important work item such as financial data or a less important work item such email,col.9, lines 64 to col.10, lines 3)

to a first backup component (a first backup component is taught as a fist computer-readable backup storage medium which is a fist type (col.7, lines 3-6, it is also considered as a backup tail in col.14, lines 1-3); and

when a data update for the portion of data is received (it is taught as a work item that is incrementally backed up since an incremental backup only backs up parts of the work item that has changed since the previous backup, col.14, lines 11-16) at the first backup component (all data update generated periodically in a backup tail which includes the first backup component; col.14, lines 29-31) from a primary source (a primary source is taught as storage device, col.7, lines 4), mirroring the data update (col.14,lines 31-32) to a second backup component (it is taught as a second computer-readable backup storage medium, col.7, lines 9-13, it also can be considered as a single logical duplication trail, col.14, lines 31-32) that is not assigned responsibility for the portion of data (a second computer-readable backup storage medium is a second type that differs from the first type, col.7, lines 9-13).

Regarding claims 2,17 and 32, St. Pierre teaches further comprising: when the data update for the portion of data is received at the second backup component that is not assigned responsibility for the portion of data from the primary source, forwarding the data update to the first backup component (this limitation is taught as synchronous media duplication, col.1, lines 28-30).

Regarding claims 4 and 19, St. Pierre teaches further comprising:

when the data update for the portion of data is received at the second backup component that is not responsible for the portion of data, storing the data update (it is taught as the data update is stored in both backup storage media and duplicate backup storage media, Fig.5).

Regarding claims 5 and 20, St. Pierre teaches the first backup component and the second backup component communicate over a first communication path (a first communication path is implied in the reference since St. Pierre teaches that the data update in a backup tail are to be duplicated each night onto a single logical duplication trail) and wherein the first backup component and second backup component communicate with the primary source over a second communication path (Fig.4).

Regarding claims 6 and 21, St. Pierre teaches the first backup component, the second backup component, and the primary source communicate over one communication path (Fig.4; col.5, lines 42-53; it is taught as backup data form a storage device to a backup storage medium and to the duplicate backup storage medium).

Regarding claims 7 and 22, St. Pierre teaches further comprising:

wherein each of the multiple backup components maintains a mapping of which backup component is assigned to particular portions of data (col.14, lines 48-56).

Regarding claims 8,23 and 34, St. Pierre teaches when one of the multiple backup components mirrors the data update to another backup component, further comprising:

sending a sequence identifier with the mirrored data update (col.13, lines 38-45); and

keeping track of which backup component was sent the data update (col.15, lines 25-31).

Regarding claims 9,24 and 35, St. Pierre teaches when one of the multiple backup components receives a mirrored data update from another backup component, further comprising:

receiving a sequence identifier with the mirrored data update (col.13, lines 38-45); and

keeping track of which backup component sent the data update (col.15, lines 25-31).

Regarding claims 10,25 and 36, St. Pierre teaches a method for processing data updates with a group of backup components, comprising:

determining that a new backup component is active (it is taught as determining expiration times of the logical duplication trails is not expired);

near an end of a consistent transactions set formation period (it is taught as periodically generates incremental backup data), assigning responsibility for one or

more portions of data to each backup component in the group (col.14, lines 29-31) and

to the new backup component (col.14, lines 31-32); and

during a next consistent transactions set formation period (col.13, lines 55-67, it

is taught as stored sequentially), processing data updates with each backup component

in the group and the new backup component (col.13, lines 55-67).

Regarding claims 11,26 and 37, St. Pierre teaches the new backup component

becomes part of the group of backup components (Fig.4).

Regarding claims 12,27 and 38, St. Pierre teaches a method for processing data

updates with a group of backup components, comprising:

determining that a first backup component in the group is no longer available (it is

taught as data on the backup trail have become corrupted or backup storage medial in

the backup trail are unavailable); and

reassigning portions of data for which the first backup component had been

assigned responsibility to each of the other backup components in the group(col.14,

lines 29-32).

Regarding claims 13,28 and 39, St. Pierre teaches each of the backup

components in the group that was mirroring data updates for the first backup

component mirrors the data updates to the backup components that were assigned

responsibility for the portions of data to which the data updates were made (col.14,lines 11-35).

Regarding claims 14,29 and 40, St. Pierre teaches each of the backup components that is reassigned a portion of data and that has data updates for the portion of data mirrors the data updates to another backup component (col.5, lines 42-53).

Regarding claims 15,30 and 41, St. Pierre teaches each of the backup components in the group that had mirrored data to the first backup component mirror data updates to another backup component (col.5, lines 42-53).

Allowable Subject Matter

9.   Claims 3,18 and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

| Gold et al | US 6785786 B1 |
| Berkowitz et al | US 2003/0149736 A1 |

Berkowitz et al   US 6826666 B2

11.   When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. 1.111 (c).

12.   When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.

13.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasmine Song whose telephone number is 571-272-4213. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 571-272-4210. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Jasmine Song   ⟨signature⟩

Patent Examiner

February 21, 2006

FOR
Mano Padmanabhan

Supervisory Patent Examiner

Technology Center 2100

⟨signature⟩

**GARY PORTKA
PRIMARY EXAMINER**